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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,843	06/05/2006	Nicolas Giraud	09669/087001	4605

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EXAMINER	
DOAN, TRANG T	

ART UNIT	PAPER NUMBER
2431	

NOTIFICATION DATE	DELIVERY MODE
10/08/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/581,843	GIRAUD ET AL.	
	Examiner	Art Unit	
	TRANG DOAN	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06/05/2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *12-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *12-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *05 June 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *11/02/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-11 have been canceled.

2. Claims 12-28 have been added.

3. Claims 12-28 are pending for consideration.

Information Disclosure Statement

4. The information disclosure statement (IDS) submitted on 11/02/2006 is being considered by the examiner.

Specification

5. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Applicant fails to provide proper antecedent basis for the following terminologies "first checksum and second checksum".

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 12-28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 12 and 22 recite a method, which is interpreted as a computer program, however, the claims fail to assert the program recorded on an appropriate computer-

readable medium so as to be structurally and functionally interrelated to the medium and permit the function of the descriptive material to be realized. Since a computer program is merely a set of instructions capable of being executed by a computer without a computer-readable medium needed to realize the computer program's functionality, it is regarded as nonstatutory functional descriptive material. See MPEP 2106.01 for details.

The claims 12, 20, 22 and 27 fail to provide a tangible result, and there must be a practical application, by either 1) transforming (physical thing) or 2) by having the FINAL RESULT (not the steps) achieve or produce a useful (specific, substantial, AND credible), concrete (substantially repeatable/non-unpredictable), AND tangible (real world/non-abstract) result.

As per claims 12, 20, 22 and 27, the result of the claims is manipulating instructions and manipulating instruction leads to no practical application. Therefore, claims 12, 20, 22 and 27fail to establish a tangible result. Therefore, claims 12, 20, 22 and 27are directed to non-statutory subject matter.

The dependent claims are depended on the rejected base claim, and are rejected for the same rationales.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 12-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Naccache et al. (US 7168065) (hereinafter Naccache).

Regarding claim 12, Naccache discloses a method for verifying execution of a program, wherein the program comprises a first code portion and a second code portion, the method comprising: entering the first code portion, wherein the first code portion comprises a first plurality of instructions (Naccache: column 8 lines 35-36); executing the first code portion (Naccache: column 8 lines 53-63; and column 9 lines 18-31); calculating a first checksum during the execution of the first code portion, wherein the first checksum is calculated using information associated with at least one of the first plurality of instructions (Naccache: column 37-50); comparing the first checksum to a first pre-calculated checksum prior to exiting the first code portion (Naccache: column 9 line 51 through column 10 line 25); and exiting the first code portion and entering the second code portion if the first checksum equals the first pre-calculated checksum (Naccache: column 9 line 51 through column 10 line 25).

Regarding claim 13, Naccache further discloses entering the second code portion, wherein the second code portion comprises a second plurality of instructions; executing the second code portion; calculating a second checksum during the execution of the second code portion, wherein the second checksum is calculated using information associated with at least one of the second plurality of instructions;

comparing the second checksum to a second pre-calculated checksum prior to exiting the second code portion; and exiting the second code portion if the first checksum equals the first pre-calculated checksum (Naccache: column 11 lines 11 through column 12 line 9).

Regarding claim 14, Naccache further discloses detecting an anomaly if the first checksum equals the first pre-calculated checksum (Naccache: column 12 lines 6-9).

Regarding claim 15, Naccache further discloses wherein a last instruction in the first plurality of instructions to be executed prior to exiting the first code portion is modified to performing comparing the first checksum to a first pre-calculated checksum (Naccache: column 12 lines 10-45).

Regarding claim 16, Naccache further discloses wherein comparing the first checksum to a first pre-calculated checksum is performed after all of the first plurality of instructions have been executed (Naccache: column 11 lines 11 through column 12 line 9).

Regarding claim 17, Naccache further discloses wherein the information associated with the at least one of the first plurality of instructions comprises at least one selected from the group consisting of content of the at least one of the first plurality of instructions, a type of the at least one of the first plurality of instructions, a function performed by the at least one of the first plurality of instructions, and a result generated by executing of the at least one of the first plurality of instructions (Naccache: column 11 lines 11 through column 12 line 9).

Regarding claim 18, Naccache further discloses wherein the first code portion is bounded by at least one pair selected from the group consisting of an entry point and an exit point, a first jump address and a second jump address, a first branch jump and a second branch jump, a routine call and a corresponding return instruction, entry to interruption handling and exit from interruption handling (Naccache: column 11 lines 11 through column 12 line 9).

Regarding claim 19, Naccache further discloses wherein the first pre-calculated checksum is calculated during compilation of the program (Naccache: column 11 lines 11 through column 12 line 9).

Regarding claim 20, Naccache discloses an electronic module, comprising: a program, comprising a first code portion and a second code portion (Naccache: column 8 lines 35-36); a first pre-calculated checksum (Naccache: See Abstract section); a processor configured to execute the program, wherein executing the program comprises: entering the first code portion, wherein the first code portion comprises a first plurality of instructions (Naccache: column 8 lines 35-36); executing the first code portion (Naccache: column 8 lines 53-63; and column 9 lines 18-31); calculating a first checksum during the execution of first code portion, wherein the first checksum is calculated using information associated with at least one of the first plurality of instructions (Naccache: column 37-5); comparing the first checksum to the first pre-calculated checksum prior to exiting the first code portion (Naccache: column 9 line 51 through column 10 line 25); and exiting the first code portion and entering the second

code portion if the first checksum equals the first pre-calculated checksum (Naccache: column 9 line 51 through column 10 line 25).

Regarding claim 21, Naccache further discloses a card comprising the electronic module of claim 20 (Naccache: column 9 lines 5-12).

Regarding claim 22, Naccache discloses a method for verifying execution of a program, wherein the program comprises a first routine and a second routine, the method comprising: entering the first routine, wherein the first routine comprises a plurality of instructions and each of the plurality of instructions is associated with a value (Naccache: column 11 lines 17-26); initializing a counter associated with the first routine, prior to executing the first routine (Naccache: See figure 4); executing the first routine, wherein the counter is incremented by the value associated with each of the plurality of instructions executed during the execution of the first routine (Naccache: column 11 line 11 through column 12 line 10); comparing a value of the counter to a pre-calculated value prior to exiting the first routine (Naccache: column 12 lines 10-45); exiting the first routine and entering the second routine if the value of the counter equals the pre-calculated value (Naccache: column 11 line 11 through column 12 line 10).

Regarding claim 23, this claim has limitations that is similar to those of claim 14, thus it is rejected with the same rationale applied against claim 14 above.

Regarding claim 24, Naccache further discloses wherein the first routine comprises a first branch and a second branch and wherein the value of the counter resulting from executing instructions in the first branch is equal to the value of the

counter resulting from executing instructions in the second branch (Naccache: column 11 line 11 through column 12 line 10).

Regarding claim 25, Naccache further discloses wherein the value associated with each of the plurality of instructions is unique (Naccache: column 11 line 11 through column 12 line 10).

Regarding claim 26, Naccache further discloses wherein the value associated with a first one of the plurality of instructions is the same as the value associated with a second one of the plurality of instructions, if a type of the first one of the plurality of instructions is the same as a type of the second one of the plurality of instructions (Naccache: column 11 line 11 through column 12 line 10).

Regarding claim 27, Naccache discloses an electronic module, comprising: a program, comprising a first routine and a second routine; a value of a first pre-calculated counter (Naccache: See figure 4); a processor configured to execute the program, wherein executing the program comprises: entering the first routine, wherein the first routine comprises a plurality of instructions and each of the plurality of instructions is associated with a value (Naccache: column 11 lines 17-26); initializing a counter associated with the first routine, prior to executing the first routine (Naccache: column 11 line 11 through column 12 line 10); executing the first routine, wherein the counter is incremented by the value associated with each of the plurality of instructions executed during the execution of the first routine (Naccache: column 11 line 11 through column 12 line 10); comparing a value of the counter to a pre-calculated value prior to exiting the first routine (Naccache: column 12 lines 10-45); exiting the first routine and entering

the second routine if the value of the counter equals the pre-calculated value (Naccache: column 11 line 11 through column 12 line 10).

Regarding claim 28, Naccache further discloses a card comprising the electronic module of claim 27 (Naccache: column 9 lines 5-12).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TRANG DOAN whose telephone number is (571)272-0740. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Trang Doan/
Examiner, Art Unit 2131
/Syed Zia/
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